

IN THE SPECIFICATION

Please amend the sub-title on page 1, line 6 as follows:

FIELD OF THE INVENTION

Please amend the sub-title on page 1, line 10 as follows:

BACKGROUND OF THE INVENTION

Please amend the paragraph on page 2, line 8 as follows:

In the following detailed description, reference is made to the accompanying drawings that show, by way of illustration, specific embodiments in which the embodiments of the invention may be practiced. These embodiments are described in sufficient detail to enable those skilled in the art to practice the embodiments of the invention. It is to be understood that the various embodiments of the invention, although different, are not necessarily mutually exclusive. For example, a particular feature, structure, or characteristic described herein in connection with one embodiment may be implemented within other embodiments without departing from the spirit and scope of the invention. In addition, it is to be understood that the location or arrangement of individual elements within each disclosed embodiment may be modified without departing from the spirit and scope of the invention. The following detailed description is, therefore, not to be taken in a limiting sense, and the scope of the present invention is defined only by the appended claims, appropriately interpreted, along with the full range of equivalents to which the claims are entitled. In the drawings, like numerals refer to the same or similar functionality throughout the several views.

Please amend the paragraph on page 8, line 10 as follows:

In one implementation, the above summations are truncated to include only the most significant terms. In the discussion above, the prior probabilities are expressed as conventional probabilities. It should be appreciated that the prior probabilities can be expressed in any of a number of alternative manners in accordance with the embodiments of the invention including,

for example, likelihood ratios, log likelihood ratios (LLRs), probability differences, and other similar formats.

Please amend the paragraph on page 13, line 3 as follows:

It should be appreciated that the principles of the embodiments of the present invention are not limited to use within communication systems. For example, any application that relies on vector quantization (e.g., speech or image compression) may benefit from the use of reduced complexity lattice decoders in accordance with the present invention. Other non-communications based applications are also possible.

Please amend the paragraph on page 13, line 8 as follows:

Although the embodiments of the present invention ~~[[has]]~~ have been described in conjunction with certain embodiments, it is to be understood that modifications and variations may be resorted to without departing from the spirit and scope of the invention as those skilled in the art readily understand. Such modifications and variations are considered to be within the purview and scope of the invention and the appended claims.